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Influences on the intention to buy organic food in an emerging market

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Abstract

Purpose – The purpose of this paper is to investigate the relationship between personal values and attitudes in an emerging market. And the authors verified whether the attitude plays a mediating role between personal values and the intention to purchase these products in the same market.

Design/methodology/approach – Two surveys were conducted with consumers of organic food in Brazil. The first study was conducted at two organic products fairs and obtained 385 responses. The second study was conducted on the internet and obtained 270 responses. The Portrait Values Questionnaire 21, plus attitude scales and purchase intent regarding organic food, was used. Data were analysed using structural equation modelling.

Findings – Significant relationships were found between personal values, such as openness to change (positive influence), conservation (positive), self-promotion (positive) and self-transcendence (negative). Significant relationships were also found between three personal values and the purchase intention of organic food (conservation – positive, self-promotion – positive and self-transcendence – negative), with all of them being mediated by attitude. The effect of openness to change on purchase intention was indirect, being mediated by attitude.

Originality/value – The authors noticed two theoretical gaps. The first involves the need to explore the attitude as a mediator in the relationship between the human values proposed by Schwartz (1992, 1994) and the intention to purchase organic food. Another perceived gap was pointed out by Steenkamp et al. (1999), Burgess and Steenkamp (2006) and Sheth (2011). These authors argue that consumption is different in emerging markets to that in more mature markets. This limits the ability to generalise consumer studies conducted in developed countries. This reasoning also applies to organic food.

Keywords Organic food, Emerging markets, Purchase intention, Personal values

1. Introduction

Organic food is the food market segment with the highest growth worldwide in the last two decades (Ladhari et al., 2011). The demand for various types of organic vegetables has increased to substantial levels (Thøgersen et al., 2015). Organic products have been sold at prices that are generally between 10 and 40 per cent higher than for non-organic foods. This suggests a distinct value between consumers of both types of food (Aertsens et al., 2011).

Many studies (e.g. Chryssohoidis and Krystallis, 2005; Grunert and Juhl, 1995; Hsu and Chen, 2014; Schrank and Running, 2016; Tsakiridou et al., 2008) have been developed to provide explanations about variables that are directly associated with the consumption of organic products, such as the values, attitudes and purchase intention of customers for these products.

According to the Social Identity Theory (Tajfel and Turner, 1986), the identity comprises to levels: personal and social identity. The consumer may seek in consumption a way to reinforce his identity by responding to a given situation in ways that are consistent with
either individual’s personal identity or one of many social identities; however, it is known that this response is driven by context (White et al., 2012). Despite the external influence, consumers select products based on their personal values (Kahle and Xie, 2008). In the consumption context, value refers to an abstract type of social cognition used by consumers to store and guide general responses to marketing stimuli (Kahle, 1996), which means values shape preferences.

Consumers may consider a product looking to attributes that deliver consequences, which in turn contribute to value fulfilment. The literature about values in consumer behaviour defends that the understanding of a person’s values helps researchers to understand a person’s relation to brands or products (Kahle and Xie, 2008). In this sense, we propose to test the Schwartz’s value theory (SVT) (Schwartz, 1992, 1994) in order to explain consumption behaviour of organic foods in an emerging marketing. Schwartz’s personal values were combined with consumption of ecological products (Fraj and Martinez, 2006), with budget products (Pepper et al., 2009), among others (Koo et al., 2008; Ledden et al., 2007; Schiffman et al., 2003).

We noticed two gaps within the literature. The former concerns the need to understand the mediator role of attitude in the relationship between the motivational values and attitude regarding the consumption of organic products. SVT suggests that human beings experience two essential dilemmas (self-transcendence × self-promotion and conservation × openness to change) and these polarities tend to be negatively correlated with each other.

Such a theory has been used to explain the intention to buy organic food (e.g. Dias et al., 2016; Thøgersen, 2011; Thøgersen and Zhou, 2012), which justifies its adoption. The contribution, here, is to manage attitude as a mediator between the values concerning Schwartz’s theory and willingness to buy organic food. We claim that this inclusion may help explain the reasons that tend to promote block attitudes favourable to the consumption of organic foods.

Another perceived gap was pointed out by Steenkamp et al. (1999), Burgess and Steenkamp (2006) and Sheth (2011). These authors argue that consumption is different in emerging markets, to that in more mature markets. This limits the ability to generalise consumer studies conducted in developed countries. This reasoning also applies to organic foods. There are indications in the literature that in different places on the planet the consumption of organic food has been associated with values of self-promotion, through the promotion of personal beauty and healthier appearance (Yin et al., 2010). However, in emerging countries such as Brazil, there tends to be greater concern for causes related to environmental degradation (Thøgersen et al., 2015), which would lead to a more self-transcending motivation. This relationship between possible motivational values with attitude towards organic foods present in emerging countries (self-promotion and self-transcendence) represents a gap to be filled in the literature on the subject, which links consumption of organic foods, emerging markets and personal values.

Thus, the main goal is to investigate the relationship between personal values and attitudes toward the organic food consumption, which leads to the main research question:

**RQ1.** What is the relationship between personal values and attitudes to purchase organic food in an emerging market?

A secondary goal is to verify whether the construct attitude exerts a mediating role between personal values and intention to purchase these products. The other question of interest is:

**RQ2.** Do the attitudes of buying organic foods play a mediating role between personal values and purchase intentions of organic foods?

The study seeks to contribute by relating a traditional theoretical model of personal values, Schwartz’s (1992, 1994) model, to the intentions and attitudes of Brazilian consumers,
a recognised emerging market. Understanding this relationship in a culturally and economically different market allows us to assess whether the attitudes regarding organic foods are dependent on the context in which consumers are inserted. This is particularly relevant because of evidence that organic food consumption tends to be more pronounced in emerging countries (EIA, 2013). The study also enables marketing practitioners to obtain a deeper understanding of the organic food market, which is the fastest growing sector in the food industry (Wang, 2010).

2. Literature review
According to Steenkamp et al. (1999), Burgess and Steenkamp (2006) and Sheth (2011), mature markets own specific characteristics, among those relevant for this study we can highlight: economic, political and legal stability; slow evolution, stagnation or even reduction in consumption; high competition; consumers who are more enlightened and demanding; a tendency toward conscious consumption. On the other hand, the same group of authors have pointed out emerging markets’ particularities: faster economic growth; economic, political and legal instability; high consumption; consumer less demanding and less informed; competition slightly high; strong tendency to hedonic consumption.

Assuming all the differences cited above, it is difficult to wonder that the consumer behaviour could be equal in both, mature and emerging markets (Sheth, 2011). Consequently, findings from mature markets may not be generalisable, which justifies the need for the conduction of specific research in emerging markets (Burgess and Steenkamp, 2006). Therefore, this investigation considers such differences in the development of this study, especially in the comparison of previous findings coming from mature markets.

2.1 Consumption of organic food
Values occupy a central role in consumer choices (Krystallis et al., 2008; Pepper et al., 2009; Thøgersen et al., 2016). Hedonism, humanist and environmental values, universalism and benevolence have a positive relationship with food consumption, including organic foods (Thøgersen et al., 2016). Reasons for buying organic foods are often based on moral and ethical values and motivated by reasons related to the environment (Chryssohoidis and Krystallis, 2005).

The unanimously declared values of the consumers of organic food in general, involve care for themselves and each other, personal values which fall under the SVT (Schwartz, 1994). For example, the most recent studies on organic food consumption show that consumers believe these foods generate welfare for their families (which reflects the goodwill value, as suggest Thøgersen et al., 2015); which is better for the environment (reflecting the universality value), and both sets of values are seen as “self-transcendence” in SVT (Dias et al., 2016; Thøgersen, 2011). Few studies around the world have investigated the relationship between a consumer’s personal values and buying organic food (Thøgersen, 2011), and even more important, none research have used attitude as a mediator in the relationship between personal values and willingness to buy organic foods.

The impact of human values on the decision to buy organic food may be mediated by consumer attitudes towards the purchase per se. The attitude refers to the fact that individual preferences determine their behavioural intentions, and it was proved that positive attitude is seen as consistent with organic food in emerging countries (Thøgersen, 2011; Thøgersen et al., 2015). Once we already know that a positive attitude towards something reveals a predisposition to adopt certain behaviours (Ajzen and Fishbein, 2005), personal values may be the drivers for consumption of these products.

Organic foods carry its own values and meanings, and therefore the high price in this case, can be perceived as an indication of superiority (Thøgersen et al., 2015). Several researchers have applied the concept of attitude in studies of consumption, including
substantive areas related to the consumption of organic food (Chryssohoidis and Krystallis, 2005; Hsu and Chen, 2014; Tsakiridou et al., 2008) found empirical evidence suggesting that personal values can better explain the consumption of organic food than demographics such as income, age or gender. Despite the impact of the theory of human values as antecedents of human behaviour, only few studies associate the personal values of Schwartz (1992, 1994) to the purchase of organic food, without using the attitude as a mediator of the relationship.

Consumption in mature and emerging markets has different characteristics; however, the lack of research studies in emerging markets does not allow us to make a consistent list of its differences. Although some authors believe that these differences may not be as relevant to the organic food market as they investigate that the reasons people buy organic foods are the same in both markets (Dias et al., 2016; Thøgersen, 2011; Thøgersen and Zhou, 2012; Yin et al., 2010).

Even acknowledging it may represent the true reality, this is a proper scenario to deepen the understand about organic food consumers in emerging markets and the influences of their personal values as an antecedent to this kind of behaviour (Burgess and Steenkamp, 2006; Sheth, 2011; Steenkamp et al., 1999), especially because barriers to buying organic foods are substantially higher in countries like China and Brazil compared with most European and North American countries, especially in terms of availability and price (Hughner et al., 2007; Thøgersen et al., 2015).

The emerging country where this research was conducted was Brazil – a market with the advantages of raw materials and agricultural natural resources (Sheth, 2011), which may be favourable to the organic vegetable market, which in this context is commonly associated with traditional agriculture, and has found an alternative market with which to present a different dynamic to traditional markets, with a very specific niche (Ingenbleek et al., 2013).

Figure 1 shows the conceptual framework guiding this study, which aims to answer the research questions.

![Conceptual model](source: Own elaboration)
2.2 Human values as antecedents of behaviour

Several researchers (e.g. Chryssohoidis and Krystallis, 2005; Grunert and Juhl, 1995; Verplanken and Holland, 2002) have sought to explain the causes and consequences of human behaviour through human values. Schwartz (1994, p. 2) argues that values are “conceptions of the desirable that guide the ways social actors select actions and evaluate people and events, explaining their actions and evaluations”. In this theory, Schwartz (1994) claims that the importance that a value has for a person in relation to other values is the criteria that prompts certain actions, he organises the value system based on two bipolar dimensions. In one dimension is the dilemma of motivating oneself through promotion (self-promotion) vs motivating oneself for reasons that transcend the interests of the subject and are aimed at the welfare of others (self-transcendence). The second involves the dilemma between the motivation for intellectual and emotional objectives that have not previously been determined (openness to change) vs the motivation to maintain and respect the principles of traditional institutions (conservation) (see Figure 2). Table I illustrates the motivational goals for each upper and lower value.

Kahle (1980) suggested that personal values have an indirect effect on consumer behaviour through attitudes. Following this logic, various marketing researchers (such as Fraj and Martinez, 2006; Koo et al., 2008; Krystallis et al., 2008; Pepper et al., 2009; Thøgersen et al., 2016; Vermeir and Verbeke, 2008; Wang, 2010) have used Schwartz’s (1994) model to explain the consumer behaviour after receiving marketing stimuli. Such explanations involved not only the psychological perspective of the individual, but cultural, social and personal factors, and their relationship to the individual’s values and their consumption (e.g. Ladhari et al., 2011; Steenkamp et al., 1999).

By adopting a social psychology perspective, the consumer can be distinguished in terms of two distinct self-construals: independent, the individual who seeks distinction from others, and the interdependent, those who desire is to use the consumption to connect themselves with others. Individuals in the first group define the self by social roles and

![Figure 2. Structure of human values](image)

Source: Adapted from Schwartz (1992, p. 45)
relationships (Yang et al., 2015). Since “personal values are learned adaptations strongly influenced by the environment” (Kahle and Xie, 2008, p. 576), as preconised by the Social Adaptation Theory (Kahle, 1996), even individuals who intend to build an independent self-construal would be highly influenced by the need an individual has to deviate from normative attitudes and behaviours in order to provide him with a sense of uniqueness and personal identity (Goldstein and Cialdini, 2009).

2.3 Research hypotheses

It follows from SVT that the ten values must be correlated in accordance with the structure values (Schwartz and Boehnke, 2004) and according to Thøgersen et al. (2016), this requires analysing the relationship between values and other constructs as attitudes and behaviours. The hypotheses of this study connect personal values and attitudes and the mediation of attitudes in the relationship between Schwartz’s (1994) personal values and the intention to purchase organic food, and it was created from the sets of Schwartz’s values and not the motivational goals that define them. Based on the descriptions of each value and the findings in literature, the reasons below are developed for the hypotheses proposed in this research. The various studies mentioned refer to motivational goals as the guiding consumption values and, therefore, to remind the reader to facilitate the understanding of the argument, the value to be considered is conservation, which has goals connected to motivational security, tradition and compliance.

According to Schwartz (1994), conservative people care about the individual and family security, they do not act impulsively and control their actions. These more thoughtful and conservative attitudes converge with those of organic food consumers, as seen in studies conducted in developed countries, who are concerned about the quality and origin of food consumed (Dias et al., 2016).

Compared to previous studies in developed countries, however, significant correlations with types of securities involving conservatism and organic food consumption were also identified. These correlations suggest that in emerging markets, organic foods are perceived as traditional and safe, and therefore valued by those markets, not as something new and exciting in contrast to the motivational goals in the opposite of conservatism (openness to change) (Thøgersen et al., 2015). In considering the characteristics of emerging markets, such as seeking the life standard of developed markets and to increase life expectancy,
organic foods is used as a good eating option, which suggests the value of personal conservation as an element that leads individuals carrying this type of value to have a positive attitude towards the purchase of organic foods, especially in emerging markets. Thus, we elaborate the following hypotheses:

**H1.** There is a positive relationship between personal conservation values and attitudes to purchasing organic food.

**H2.** The attitude of purchasing organic foods plays a mediating role in the relationship between personal conservation values and the intention of purchasing organic foods.

Given the relationship between conceptual opposition and negative association found in SVT (Schwartz, 1994), we assumed that factors related to a positive pole of the theoretical model of Schwartz's values would show a negative relationship with the diametrically opposite pole. Such a negative relationship makes sense in emerging markets, where the openness to change may be connected to the consumption of food from developed markets, such as fast foods and industrialised foods, leading to a reduction in the consumption of organic foods. Openness to change in emerging markets often refers to purchasing habits of developed countries (Dias et al., 2016). Accordingly, in contrast, we suggested that:

**H3.** There is a negative relationship between the personal value of openness to change and attitudes to purchasing organic food.

**H4.** The attitude of purchasing organic foods plays a mediating role in the relationship between the personal values of openness to change and the intention to purchase organic food.

The hypotheses below refer to the set of self-transcendent values which include the motivational goals of universalism and benevolence, which represent the desire for well-being for others and the environment. Studies of organic farming and the organic market show the concerns of people with the types of farming and its effect on the environment (e.g. Dias et al., 2016).

These are, among other things, features that form the universality often found in previous studies as an identified value between the consumer and organic food. It is often noted that buying organic food increases with a belief in universalism, in various markets where buying behaviour was studied (Thøgersen et al., 2015).

In general, both mature market cultures and emerging markets have favourable attitudes towards buying organic foods when there are universalistic characteristics (Sahakian and Wilhite, 2014; Smith and Paladino, 2010; Thøgersen, 2011; Thøgersen et al., 2015; Yadav and Pathak, 2016). According to Thøgersen and Zhou (2012), however, some studies suggest that this value, as a determinant for buying organic food in China, appears to be weaker than in other countries.

Environmental awareness plays a significant role in determining the intention to buy organic food (Smith and Paladino, 2010). Increasing concern for the environment is responsible for the increased consumption of organic food; however, a surprising result was that environmental concerns had no significant influence on the intention to purchase organic food in India, contradicting the literature. This result reinforces the need for more studies in emerging markets, as they can demonstrate that what is advocated in the consumer literature regarding organic food may not make sense in developing cultures, as in the case of India, China and Brazil (Thøgersen et al., 2015).

Considering that the results previously found are not consensual, we opt to rely on the vast majority of previous studies regarding universalism and buying organic food, since that supposedly, people with personal values linked to self-transcendence would tend to consume organic foods, especially in emerging markets, where the effects on the natural
environment are increasingly present in their daily lives (Dias et al., 2016). The following hypotheses were proposed for this study:

\[ H5. \] There is a positive relationship between the personal value of self-transcendence and attitudes to purchasing organic food.

\[ H6. \] The attitude of purchasing organic foods plays a mediating role in the relationship between personal values of self-transcendence and the intention to purchase organic foods.

Self-promotion is characterised by the usage of internal standards for levels of excellence, involving care for someone’s own health and this feature can be seen as favourable for buying organic food (Paul and Rana, 2012). It is used as the basis for the next chance the conceptual relationship of opposition and negative association between the poles of the personal values of SVT (Schwartz, 1994).

Note that although egocentric values can be strong motivators for buying organic foods, such as self-realisation, the study of Thøgersen et al. (2015) shows that in Brazil there was a negative correlation between self-realisation and organic food consumption, thus once embodiment pertains to self-promotion that has an opposing relationship with self-transcendence; it becomes consistent with the proposed \( H5 \) and \( H6 \).

It is thus assumed that the relationship of the self-transcendence value with attitudes about buying organic food, as well as with the intention to buy these foods, is positive; if the value was the polar opposite of this, it would be otherwise. In addition, in emerging markets, self-promotion is often related to the consumption of products and services offered in mature markets (Thøgersen et al., 2015), including feeding. As industrialised foods, especially fast foods, reflect the culture of developed markets, the individual self-promote oneself in emerging markets may prefer this type of food, in detriment of organic food. Accordingly, we suggested that:

\[ H7. \] There is a negative relationship between the personal value of self-promotion and attitudes to purchasing organic food.

\[ H8. \] The attitude of purchasing organic foods plays a mediating role in the relationship between personal self-promotion values and the intention to purchase organic foods.

3. Methods

3.1 Samples and data collection

The research targets were the current and potential Brazilian consumers of organic food. Brazil was chosen because it is an emerging market, since the previous findings in mature markets tend to be questionable regarding their replication in emerging markets, as pointed out by Burgess and Steenkamp (2006) and Sheth (2011). Brazil is a major producer and exporter of food, with a developed and mechanised agriculture, however, organic production in Brazil is still incipient. Reasons for this include the prohibitive cost of production, the high losses and the product itself, which typically does not have the appearance, flavour or size demanded by ordinary consumers. In addition, the country suffers with logistical problems, like transportation and storage (Thøgersen et al., 2015).

On the other hand, organic food is gaining space in Brazil among a small group, consumers with greater financial capacity and better education (Dias et al., 2016), once this target audience of the survey (consumers of organic food) is not easy to access at random, we decided to collect data in two diverse ways.

Study 1 was conducted within individuals (385) who attended organic food fairs in Vitória (ES) and in Rio de Janeiro (RJ), the same strategy employed by Chryssohoidis and Krystallis (2005). The researchers themselves were responsible for collecting the data applying paper questionnaires at various times in order to avoid possible bias.
As we can assume that in Study 1 the sample was composed only by respondents determined to buy organics, we conducted a second study to prevent any sampling bias, as noted in the guidelines by Ingenbleek et al. (2013). Study 2 was conducted online, and the public was invited to participate via e-mail and the survey was also spread out through social networks, especially in groups linked to organic food consumption. We reached 301 respondents, however 31 were excluded because they had no intention of consuming organic products. Inappropriate responses were not considered also (e.g. answers that were all the same). Thus, the final sample contained 270 questionnaires.

This second sample proved to be relevant for reaching individuals with the intention of consuming organic foods, but who do not attend organic food fairs. Such products are not only available at street markets, but also supermarkets, specialized stores and directly at the organic food production sites (rural zone). Considering this, a wider audience was reached than simply organic food fairgoers, making the research results more robust.

3.2 Measures

Measures were the same in both studies, allowing comparison of results. Personal values were measured by the Portrait Values Questionnaire (PVQ 21), consisting of 21 questions that describe other people and in which the research participant must score the degree to which a person looks like them or not, on a Likert scale of five points, where 1 is “nothing like me” and 5 “much like me”. The responses indicate the motivational types of each participant and consequently their personal values.

Attitudes were measured on a Likert five-point scale, where 1 refers to “strongly disagree” and 5 to “strongly agree”, through nine questions. These related to attitudes towards buying organic food and indicated whether the subject had favourable attitudes to buying organic food or not. The scale used was that of Chryssohooidis and Krystallis (2005).

The intention of buying organic food was operationalized through the scale of Hausman and Siekepe (2009), which originally involved four issues, but had a question deleted since two of the items were very similar. According to Netemeyer et al. (2003), this could artificially increase the reliability of the instrument. The scale was adapted in this study to reflect the intention to buy organic foods. There were three questions assessed on a five-point Likert scale, where 1 refers to “strongly disagree” and 5 to “strongly agree”.

3.3 Analytical procedures

The model used in this study to test the relationship between personal values, attitudes and the intent to purchase organic foods was evaluated using AMOS software (v.22), using the maximum likelihood method applied to the original items. The existence of outliers was assessed by the square distance of Mahalanobis ($d^2$) and the normality of the variables was evaluated by the asymmetry coefficients of skewness (Sk) and kurtosis (Ku). A two-step strategy was applied in the model adjustment: the first step set the submodel and Step 2 set the structural model.

The modification index (MI) calculated by AMOS was applied to refine the model. We considered MI > 11 as an evidence of local fitting problems and, after the theoretical plausibility of modifications was assessed, measurement errors leading to a considerable improvement of the model adjustment were correlated. The construct reliability and the average variance extracted (AVE) were evaluated for each factor. The relative normed fit index (RNFI) was also calculated to evaluate the quality of the overall structural model. We considered RNFI > 0.8 to be indicative of good adjustment. Finally, the significance of the direct, indirect (mediation) and total was evaluated by a Bootstrap simulation, with 5,000 repetitions, as indicated by Preacher and Hayes (2008) and Hayes (2009, 2013). Significant effects were considered as $p$ was less than or equal to 0.05.
4. Data analysis and discussion

4.1 Study 1
The first sample was primarily composed of women (62 per cent) and the age range was mainly concentrated in groups from 30-35 years (36 per cent) and 35-40 years (34 per cent). The most common level of education was higher education (53 per cent), followed by post-graduate (26 per cent) and high school level (18 per cent).

The analysis showed no variable with values for Sk and Ku to indicate severe violations of normal distribution ($|\text{Sk}| < 3$ and $|\text{Ku}| < 7-10$). Eight observations showed $d^2$ values, suggesting their removal as outliers ($p_1$ and $p_2 = 0$). The analysis was thus performed without these observations, which reduced this sample to 377 observations.

4.2 Study 2
The second sample was primarily composed of women (68.5 per cent) and the age range was mainly concentrated in groups from 30 to 39 years (31 per cent) and 40 to 49 years (36 per cent). The most common level of education was the higher education (29 per cent), followed by post-graduate (28 per cent) and master’s degree (23 per cent). The characteristics of this second sample were clearly similar to those of the first sample, suggesting that the consumers of organic food in Brazil can be characterised as adults, mostly female, and with higher education (Dias et al., 2016). The samples appear to represent the typical consumer of organic food in Brazil.

As per the previous sample, analysing the data of the second sample revealed no variable with values for Sk and Ku that indicated severe violations of normal distribution ($|\text{Sk}| < 3$ and $|\text{Ku}| < 7-10$). In addition, seven observations presented $d^2$ values suggesting their removal as outliers ($p_1$ and $p_2 = 0$). The analysis was thus done without these responses, which reduced this sample to 263.

4.3 Data analysis
After evaluating the samples, one from organic food fair (385 respondents) and the other obtained from the general public (270 valid responses), both were aggregated to form a single base of 655 observations. We have identified and deleted 15 outliers. Some items were removed: CO1 (belonging to conservation factor), AP2 (self-promotion factor), AM3, AM6 (openness to change factor), AT2 (self-transcendence factor), which had factorial loads below 0.5, item AO4 was eliminated (attitude factor), which MI suggested saturation of this item in factors different from those suggested in theory.

Error measures were then correlated for items AO1, AO2, AO3, AO5, AO6, AO7, AO8 and AO9, belonging to the attitude factor, and items AM1 and AM5, openness to change factor. Thus, the final causal model of the latent factors under study revealed, in general, an appropriate quality of fitting (Figure 3). More specifically, the absolute index (GFI) suggested that the model presents fitting that is reasonable only (GFI = 0.879). However, the absence of conducting a comparison of the model being analysed with either better or worse possible fitting models indicates that the use of absolute fitting indexes is not very useful. In this sense, we proceeded to analyse the relative indexes, which indicated a good fit for the model (CFI = 0.920 e TLI = 0.906). Following, we analysed parsimony indexes, which also indicated a good fit for the model (PGFI = 0.700 e PCFI = 0.789), the index of population discrepancy also indicated that the model has acceptable fitting (RMSEA = 0.064). Finally, the quality of the overall fitting can be considered suitable (RNFI = 1).

The CR proved to be appropriate, with the values of all the constructs exceeding the minimum of 0.7 (Table II). The AVE, an indicator of the validity of the convergence of factors, proved to be low for openness to change (AVE = 0.39) attitude (AVE = 0.45) and conservation (AVE = 0.39) (Table II). Figure 3 shows the values of standardised factor
weights and the individual reliability of each of the items of the final model. The discriminant validity of the factors was assessed by comparing the AVE with the square of the correlation between the factors. The results indicated the discriminant validity of all the factors (main diagonal of Table II). All factor loadings between factors and their variables were higher than 0.5 (Figure 3), reinforcing the discriminant validity.

Finally, Table III shows the relationships of influence of personal values on the attitude related to the purchase of organic foods. Table IV presents the relationships between personal values and the factors.
values, the attitudes related to the purchase of organic food and the intention to purchase organic food. Table V shows the direct effects, indirect effects (effects of mediators latent variable Attitude) and totals of all relationships studied, after performing the bootstrapping procedure, as instructed by Preacher and Hayes (2008) and Hayes (2009, 2013).

4.4 Hypotheses and discussion

As indicated in Table III, H3, which relates openness to change and attitude, thus presented the opposite result, a negative relationship, but the relationship was positive. According to the literature (Grunert and Juhl, 1995; Krystallis et al., 2008), it is assumed that the consumption of organic food is more closely related to conservation, a type of behaviour that individuals use to preserve themselves. According to Schwartz (1992, 1994), conservation is opposed to openness to change, and so the result here seems to go against the established theory. A deeper understanding of Brazilian context, as presented by Thøgersen et al. (2015)
and Dias et al. (2016), as well as assessing cultural differences in emerging markets pointed out by Steenkamp et al. (1999), Burgess and Steenkamp (2006) and Sheth (2011), is imperative for extract sense from the findings.

The works mentioned above treat the consumption of organic food in Brazil, as in other emerging markets, as a novelty, being a more common behaviour for the elite, indicating adherence to change, to a new pattern of consumption, not practised by the majority of the population. In this sense, the results found here, despite going against SVT (Schwartz, 1992, 1994), might be expected in emerging markets, as observed in Brazil.

Following this same line, the hypothesis related to conservation, $H1$ was supported, as the result showed a positive and significant relationship between attitude and conservation. That is, as expected and mentioned in the literature (Pepper et al., 2009; Thøgersen et al., 2016; Vermeir and Verbeke, 2008, among others), the consumption of organic food is directly involved with preservation of the individual, security and an increase in life expectancy. Even in emerging markets, the consumption of organic foods thus reveals an individual's concern with themselves. The confirmation of $H1$ reinforces the evidence that organic food consumption in emerging markets is uncommon practice, destined only to the elite.

The results of $H1$ and $H3$ reveal a difference in behaviour mature markets and emerging markets. Whereas in mature markets, organic foods tend to be related to individuals with personal values linked to self-preservation (Pepper et al., 2009; Thøgersen et al., 2016), such foods are not new, that is, they have been very present in these markets for some time. Thus, people with personal values linked to openness to change may consider that organic food do not represent a novelty, with the attitude before these foods being a conservative behaviour, which is a contrary behaviour to people seeking news and innovations (Krystallis et al., 2008).

Although this does not seem to be true in emerging markets. The organic foods in these markets appear, at the same time, to be important for people with personal values related to self-conservation and for people with personal values of openness to change. In other words, in spite of the opposing relationship between these values (Schwartz, 1992, 1994), in emerging markets, the attitude to purchase organic food represents both personal conservation, as openness to change.

Organic food is known to contribute to self-preservation, but are a novelty, an innovation for consumers in emerging markets (Thøgersen et al., 2015), being identified here. Thus, this result indicates that organic foods, in emerging markets, can be presented as an important innovation that preserves the life of the people of these markets, bringing them closer to the people who consume them in mature and developed markets. It is important to note that many consumers in emerging markets base their consumption in mature markets in order to perform their own consumption, trying to get closer to consumers in more developed markets, a peculiar characteristic of emerging markets (Dias et al., 2016).

Contrary to our expectation $H5$ was negative and significant. The result of the hypothesis tested reveals that the attitude towards organic foods for the Brazilian consumer refers little to social or environmental concerns. The literature which addresses SVT (Schwartz, 1992, 1994) indicates that organic food consumers have a concern for the environment and society, portrayed by benevolence and values of universalism (Tsakiridou et al., 2008). Behaviours such as these seem to make sense in mature markets (e.g. Krystallis et al., 2008; Pepper et al., 2009), but in Brazil, the result shows evidence of a major feature of Brazilian culture, individualism (Thøgersen et al., 2015). The concern appears to be individual, that is, what the consumption of organic food means to the person himself and not to society or nature. Following Schwartz (1994), the person is not self-transcendent, seeks self-promotion, something that was evident here, strengthening the opposition values as proposed by the theory. After all, the relationship between self-promotion and attitude ($H7$) was positive and significant, and again the opposite of the result expected. Looking at the phenomenon with the emerging markets' lens, the findings reveal the concern for personal benefit, whether in health or in society. As this kind of
consumption is elitist in Brazil (Dias et al., 2016), consuming organic foods appears to be a source of gaining social status, promoting the individual in society, something that is often relevant to participants of the elite in emerging markets.

This evidence per se may be interpreted as a complementary finding to SVT (Schwartz, 1994), and a signalling about the importance in differentiate the attitude toward organic foods in mature and emerging markets. The former is positively associated with self-transcendence and negatively associated to self-promotion (Paul and Rana, 2012; Smith and Paladino, 2010; Thøgersen, 2011; Thøgersen et al., 2015; Yadav and Pathak, 2016), while for the other this relationship was proved to be inverse – positively associated to self-promotion and negatively to self-transcendence.

It seems to be an incoherent result, but this reveals a bit more of the peculiar characteristics of consumers from emerging markets, who take advantage of the consumption of organic food as a source of self-promotion, as they participate in an enlightened social elite and aware of the importance of organic foods (Dias et al., 2016). This socially promotes people living in emerging markets, even if the individual does not value the positive aspects of organic food for the protection of the natural environment.

In fact, what has been perceived is that the attitude towards organic food does not mean environmental care for the consumers in emerging markets. In their view, looking after the nature has to do with controlling factories and pollution. In this same vision, the individual does not see oneself as directly responsible for the preservation of the environment (Yin et al., 2010). In summary, the results of H1, H3, H5 and H7 indicated that self-preservation is the mechanism by which consumers from emerging markets make their decisions toward organic foods, conversely consumers from mature markets present other values regarding the same products (Dias et al., 2016). Considering this difference, when importing green marketing techniques and tools used in mature markets, marketing strategies and tactics require adaptations and changes in emerging markets (Thøgersen et al., 2015). Clearly the direct application of green marketing strategies from mature markets tends to be ineffective in emerging markets once consumers have distinct values.

4.5 Mediator effect of the attitude factor (AO)

A bunch of previous works have used the attitude construct has a mediating effect between personal values and the intention to buy organic food (e.g. Grunert and Juhl, 1995; Krystallis et al., 2008; Thøgersen et al., 2016), the reason why we included, the mediating effect of attitude on purchase intention on ours model. First, we calculated the direct relationships of personal values, attitudes and intention to buy organic foods. The results are displayed in Table IV. Then, we did the attitude mediation test between personal values and the intention to purchase organic foods (see Table V).

It is clear from the results that openness to change (AM) only interferes indirectly with purchase intent, supporting H4. That is, being open to change form the attitude that can lead to the intention to purchase organic foods. It is clear that for the other constructs the influence is more direct than indirect. The conservation (CO) and self-promotion (AP) factors influence the purchase intention more directly than indirectly. The indirect effect is observed, which supports H2 and H8, but this effect is quantitatively small. Worrying about their own preservation and gaining more social status potentially generates an intention to purchase organic food, without necessarily requiring an attitude in the individual that is conducive to the consumption of organic food. This result can be explained by the characteristics of Brazilian consumers of organic foods, who usually belong to the Brazilian elite, as previously explained.

Finally, self-transcendence (AT), which generates negative effects both on attitude and on purchase intention, appears to be partly mediated by attitude in its negative influence on the intention to purchase organic food, supporting H6. The results in Table V demonstrate
that attitude was about one-third of this influence. As the explanation is directly related to the Brazilian consumer behaviour, which is naturally individualist, the trend is that such consumers in their values and attitudes only have intentions to purchase organic foods when individual benefits are seen in such acquisition.

In summary, the measurement tests pointed out the importance of the attitude related to the purchase of organic foods as a mediator between the personal values of individuals and their intent to purchase organic food, being in line with the existing literature (Grunert and Juhl, 1995; Krystallis et al., 2008; Thøgersen et al., 2016). Personal values constitute a relevant driver in purchasing organic food.

5. Conclusions
Consumer behaviour of emerging markets towards organic food differs from the behaviour of similar consumers in mature markets, mainly because they are much more concerned with themselves than with the environment or society. Consumers from there use consumption a manner to express/expand health and social status, which means, personal values associated with attitude and the intention to purchase organic food is mainly connected to conservation and self-transcendence, which exerts a negative influence, and openness to change exerts an indirect influence on purchase intent. In sum, favourable attitudes regarding the purchase and consumption of organic food seems to be concentrated in the elite of emerging countries, with these consumers seeking to improve their health by copying behaviours. Adherence to this novelty brings status to the consumer of organic food. It is worth highlighting that environmental and social concerns do not seem to influence the consumer of organic foods from emerging countries, reinforcing the individualistic characteristic present in this type of market.

5.1 Theoretical implications
The main theoretical implication of this manuscript involves a connection between personal values and attitudes related to the purchase and consumption of organic food. This connection evidences the attitude as a mediator between personal values and the intention to purchase organic foods, something that is clearly unprecedented in literature. Traditionally, research (e.g. Grunert and Juhl, 1995; Krystallis et al., 2008; Thøgersen et al., 2016) connect personal values directly to the consumption of organic foods, usually without considering the mediating effect of attitude. This effect was evidenced by the findings. It can be noticed that attitude exerts a relevant role on buying and consumption of organic foods. Additionally, its mediator effect in the relationship between personal values and willingness to buy this kind of goods. Thus, the mentioned effect can be considered in further studies that will address the both personal values and willingness to buy organic foods.

Other theoretical implication of the results involves an adjustment of the relationships indicated in the literature, which connect the personal values proposed by Schwartz (1994) and attitude and intention to purchase organic food. In mature markets, positive relationships are linked to conservation and self-transcendence, and negative relationships are connected to openness to change and self-promotion. In emerging markets, these relationships are not necessarily the same, highlighting difference that shows that emerging markets require specific studies, on the principle that such markets behave differently from mature markets (Burgess and Steenkamp, 2006; Sheth, 2011; Steenkamp et al., 1999).

There seems to be an inversion of self-promotion and self-transcendence, self-promotion being a motivator for the consumption of organic food and self-transcendence an inhibitor. Conservation and openness to change thus go together and are not opposite poles, but direct and indirect influences on intentions of buying organic food. In summary, the model of Schwartz (1994) requires adjustments in order to be used to assess personal values and organic food consumption in emerging markets, reinforcing the arguments already presented by Burgess and Steenkamp (2006), Sheth (2011) and Steenkamp et al. (1999).
5.2 Managerial implications
The behaviour of consumers of organic food in an emerging market was revealed here as having practical implications. It was noted that such a consumer, connected to the elite of this country, generally has higher education and a concern for their health and their social status. The results indicate that the professionals who work in this market can develop their targeted strategies to reach this audience as well as understand how they behave. Respecting the cultural characteristics of each emerging market, may lead to the development of new products and services within the organic food segment, as consuming organic food in Brazil is still synonymous with status and connected with most emerging trends. Thus, the insipid Brazilian organic food industry can conquer the market by directing its communication effort to strengthen the status of people who consume organic foods, potentially acquiring more consumers seeking social status.

On the other hand, the fact that consumers of organic food in emerging markets do not value the environmental and social aspects of this type of consumption is a cause for concern. It is thus recommended that marketing professionals from organic food industry seek to develop this feeling among these consumers, as well as attract the interest of other consumers, especially young people, in search of a healthier diet that contributes to the conservation of nature.

Also as a practical implication, we highlight the mediator effect of attitude relative to the purchase and consumption of organic food. Green marketers can develop strategies to arouse such attitudes in potential consumers in emerging markets. Such attitude is revealed when organic food is presented as a novelty, that preserves health and awards status to the consumer. On the other hand, arguments related to environmental preservation seem to have little effect on potential consumers of organic food in emerging markets. That is, the argumentation and communication of organic foods in emerging markets requires specific strategies, not being possible to use the same green marketing strategies that are successful in mature markets.

5.3 Limitations and future lines of research
The research has some limitations: the sample was composed only of people who consume organic food in Brazil (older people with high education), and it was not possible to reach different audiences for possible comparisons. As the respondents belong to the Brazilian elite, the results do not necessarily represent Brazilian consumer behaviour in general.

Future research studies could focus on young people in an attempt to identify whether they are more self-transcendent than older consumers. It could also be possible to test: gender effects on the relationship between personal values and the consumption of organic food; the extent to which the incremental cost of organic food; the role of attitudes in behavioural intentions or even in consuming actions; and whether the image of organic foods in emerging markets differs from mature markets. And least, we encourage the replication of the same research in other emerging markets may find common behaviours giving more robustness to findings alike ours.

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Further reading

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